

ABSTRACT OF THE DISCLOSURE

An image detection processor of the present invention enhances the processing speed of the calculation of the center of gravity or the like of a target with a simple constitution. The image detection processor arranges a plurality of image detection processing elements 1-1 to 1-64 on a plane. Each image detection processing element includes an adder circuit 15 which converts an output of a photoelectric conversion part 5 into digital signals and can receive the digital signals as an input in a matrix form. Cumulative adders are constituted by connecting the adder circuits 15 for respective rows. Series adders 2-1 to 2-8 which are connected in series respectively receive outputs of final stages of cumulative adders of respective rows as inputs and can cumulatively add these outputs. The digital signals are selectively inputted to the cumulative adders using a row decoder 3 and a column decoder 4 and processed data of an image detected by photoelectric conversion parts 5 of a plurality of image detection processing elements are outputted from the series adder 2-8. Due to such a constitution, the processed data necessary for an image processing such as the calculation of the center of gravity can be produced at the time of transferring data thus realizing rapid processing.